

**REMARKS**

Claims 1-8, 12-21, 26-35, 40-42, 44-47, 49-52, 54, 71, and 74 have been rejected under 35 U.S.C. §102(b) as being anticipated by Ahamed (Carbohydrate Polymers 31:99-103 (1996)).

Claims 1-8, 12-21, 26-35, 40-42, 44-47, 49-52, 54, 71, 74-75, and 80 have been rejected 35 U.S.C. §102(b) as being anticipated by Wurzburg (US 4,428,972).

Claims 1-8, 12-21, 26-35, 40-42, 44-47, 49-52, 54, 71, 74-75, and 80 have been rejected 35 U.S.C. §102(b) as being anticipated by Yasui.

Applicants respectfully traverse the above rejections. The claims of the present invention are directed to a "potato starch which, when in native form extracted from a *potato*..." [emphasis added]. Ahmed teaches a quinoa starch, Wurzburg a maize (corn) starch, and Yasui a wheat starch. None teach a potato starch as claimed. It is well known in the art that potato starches are not freeze-thaw stable and thus a freeze thaw stable potato starch is novel. Thus, it is clear that none of the references cited anticipate the present patent.

The Examiner has countered that the recitation of "potato" is not seen as limiting the claim without a showing that starch extracted from potato has a different structure or different properties from starch extracted from any other source.

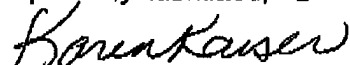
It is well known in the art that potato starch differs significantly from other starch sources in a variety of ways. To begin, potato is a tuber, not a cereal grain such as corn, wheat and quinoa (see Starches, Thomas and Atwell, p. 7 and Atwell, et al. "Characterization of Quinoa Starch", Cereal Chem 60(1):9-11, attached). Potato starch is also a charged polymer due to its significant phosphate content which there is no significant phosphorous in corn, wheat or quinoa. This phosphate content results in a higher viscosity in deionized water (see Starches, Thomas and Atwell, p. 21, attached). The molecular weight of amylose in potato starch is typically about twice that of other starches (see "Ong, et al., "Simultaneous determinations of molecular weight distributions of amyloses and the fine structures of amylopectins of native starches", Carbohydrate Research, p. 109 (1994) enclosed). Further, potato starch has a low lipid and protein content compared to corn, wheat or quinoa starch (see Starches, Thomas and Atwell, p. 9 and Atwell, et al. "Characterization of Quinoa Starch", Cereal Chem 60(1):9-11, attached). Also, potato starch has a substantially larger granule size compared to corn or quinoa and differs from corn in that it has a bimodal granular size distribution (see Starches, Thomas and Atwell, pp. 7 and 13, and Atwell, et al. "Characterization of Quinoa Starch", Cereal Chem 60(1):9-11, attached). Finally, potato has a better, more neutral flavor profile than corn, quinoa or wheat (see Starches, Thomas and Atwell, p. 9, attached).

In view of the foregoing, it is clear that potato starch is different from that of quinoa, corn or wheat and that the rejections under 35 U.S.C. § 102 have been overcome. Applicant

respectfully submits that the Application is now in condition for allowance and requests early action thereon.

National Starch and Chemical Company  
P.O. Box 6500  
Bridgewater, NJ 08807-0500  
(908) 575-6152  
Dated: 29 Dec. 03

Respectfully submitted, -

  
Karen G. Kaiser  
Attorney for Applicant  
Reg. No. 33,506